

# Franklin Town Council Meeting



## Board of Commissioners

### Franklin

David C. Formato, Chairman

Wolfgang Bauer, Vice Chairman

Mark Cataldo, Clerk

### Medway

Douglas M. Downing

Ted Kenney

### Executive Director

Elizabeth Taglieri, P.E.

### Engineer/IPP Coordinator

Kristen Mucciarone, P.E.

## May 3, 2023

# Background

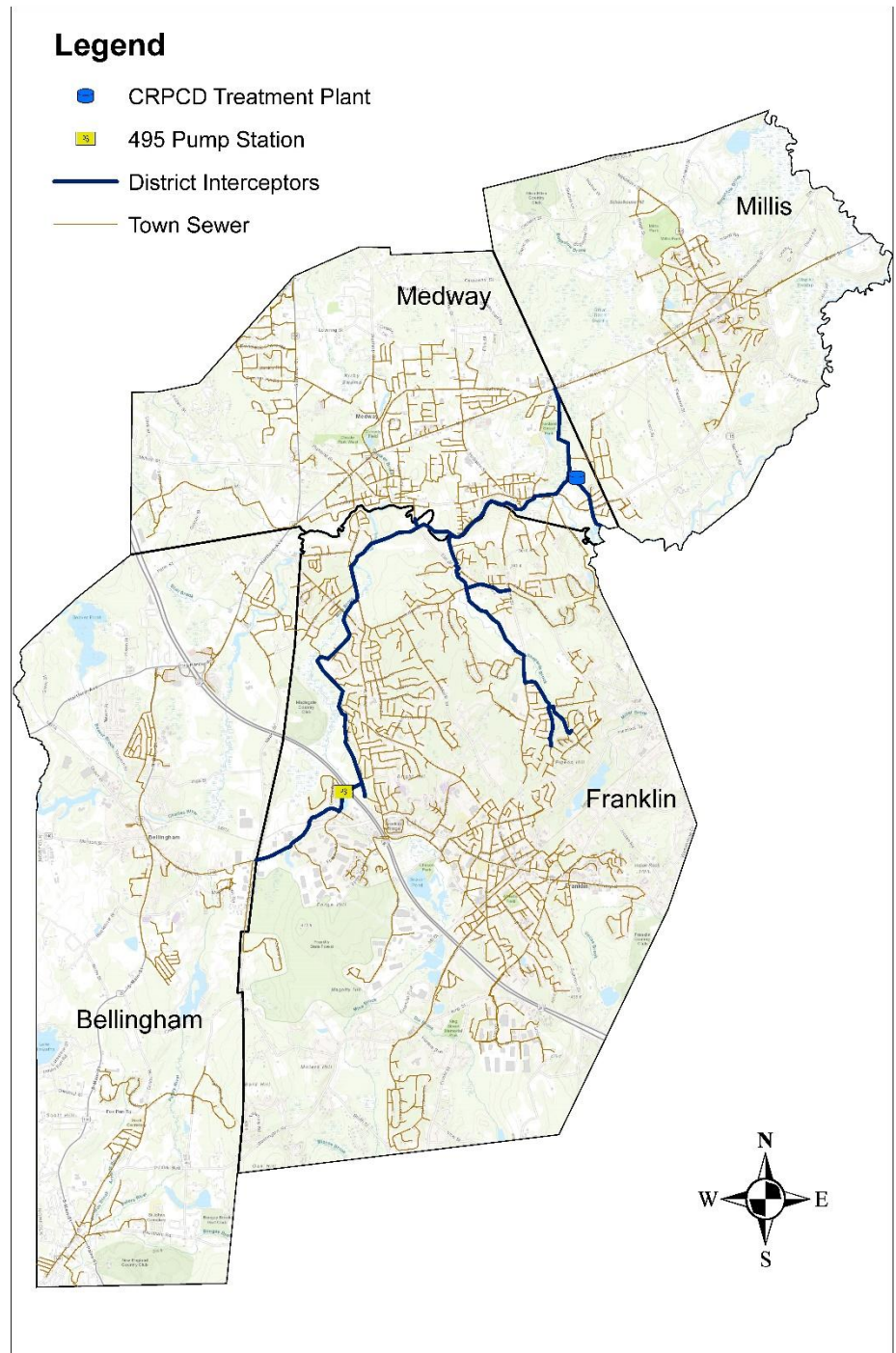
- CRPCD established in 1973 by the Towns of Franklin and Medway
- Wastewater treatment began in 1979, treatment capacity of 4.54 MGD
- Treatment plant partially upgraded in the late 1990's, increased treatment capacity to 5.7 MGD
- Major upgrade completed in 2012 - 2016 to replace aging equipment, cap on-site landfill and to meet more stringent total phosphorus permit limits - \$30M total
- Currently designed and permitted to treat and discharge 5.7 million gallons per day (mgd)
  - Franklin owns 63.9% or 3.642 MGD

# Collection System

Over 240 miles of sewer in Medway, Franklin, Millis and Bellingham

- 149 miles of Town owned sewer in Franklin
- 13 miles of District owned interceptors, including over 9 miles in Franklin
- District owned pump station (by BJ's in Franklin)

Towns and District inspect and repair sewer lines to remove Infiltration and Inflow (I/I)



# Treatment Process

- Screening and grit removal
- Primary clarification
- Activated sludge
- Secondary clarification
- Cloth filtration
- Disinfection with sodium hypochlorite
- Gravity belt thickening
- Off-site sludge disposal
- Effluent discharged to Charles River



# Headworks



# Primary Clarifier



# Aeration Tanks



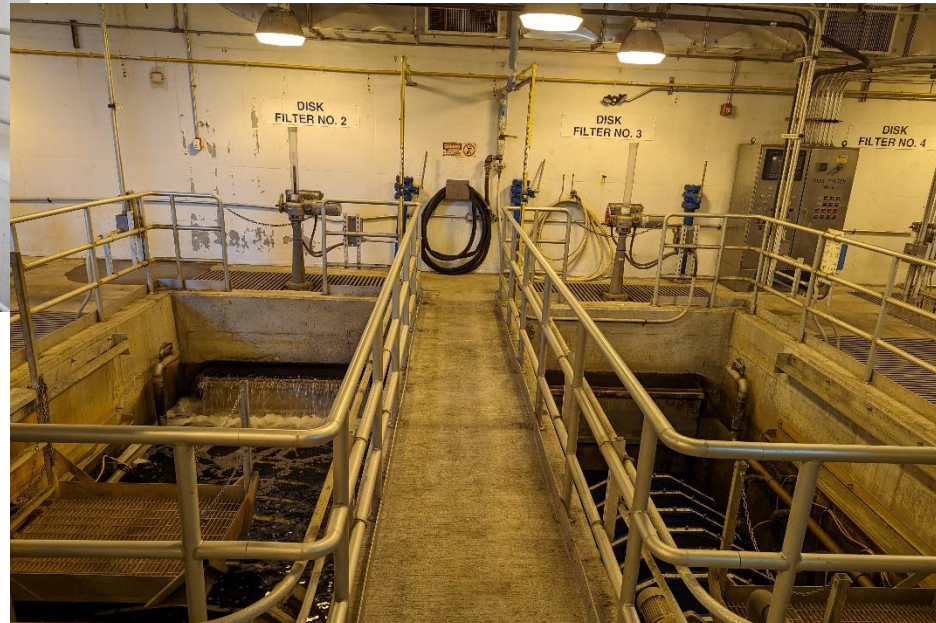
# Secondary Clarifiers



# Traveling Bridge Filter



## Disk Filter



# Chlorine Contact Chambers



# Final Effluent



# Gravity Belt Thickener



# Average Daily Flow and Projected Capacity

	Franklin	Medway	Bellingham	Millis	Raw Flow	Rainfall
	mgd					in
2016	2.41	0.779	0.253	0.356	4.26	43.75
2017	2.56	0.880	0.228	0.388	4.37	46.84
2018	3.11	1.050	0.254	0.447	5.47	65.48
2019	2.78	0.909	0.231	0.382	5.23	60.06
2020	2.60	0.858	0.227	0.368	4.63	49.18
2021	2.89	0.827	0.283	0.421	4.92	53.40
2022	2.34	0.708	0.239	0.383	4.16	44.45
<u>Three Year Average Daily Flow</u>	2.609	0.798	0.249	0.391	4.572	
Future Connections	0.070	0.100	0.113	0.175	0.458	
Three Year Average + Future Connections (mgd)	2.68	0.898	0.362	0.565	5.03	
Capacity	3.642	0.955	0.377	0.628	5.700	
Percent of Capacity - Actual	72%	84%	66%	62%	80%	
Percent of Capacity - Projected	74%	94%	96%	90%	88%	

# Look Ahead

- 495 Pump Station Force Main
  - 30 year old, 18-inch ductile iron force main pipe runs under I-495 and Mine Brook, Franklin owns 35.4%, evaluating inspection options
- Sludge Removal Costs
  - District's contract expires in 2027
  - Price Increases in Market - limited disposal options, unknowns from future PFA regulations
- Chemical Costs
  - Large increases last year, 15% to 132% increase in one year
- Discussion on Increase in Capacity
  - Preliminary discussion with the Towns and MassDEP to increase sewer capacity due to population growth
- Per- and Polyfluoroalkyl Substances (PFAS)
  - New NPDES permit will include quarterly testing at plant and industries
- Electrical Supply Rate
  - 3<sup>rd</sup> Party supply rate contract expires in 2025

# SEWER WORKS

FRANKLIN PUBLIC WORKS

# Beaver street interceptor



# Sewer Issues

- **High I & I Improvement Program**
  - **\$500K in 2022**
  - **\$500K in 2023**
  - **\$200K Study for future improvements**
- **23 Lift Stations**
  - **\$250K Grant!**



# Looking Ahead

- Limited Projected Surplus going forward
- Funding Lift Station Master Plan
- Funding Future I & I Programs
- Increased Costs from CRPCD



# Questions?



## **Come Tour the Facility or Franklin Public Works!**

Charles River Pollution Control District

[www.charlesriverpcd.org](http://www.charlesriverpcd.org)

508-533-6762

Elizabeth Taglieri, P.E.

Executive Director

[ltaglieri@charlesriverpcd.org](mailto:ltaglieri@charlesriverpcd.org)

Brutus Cantoreggi.

Public Works Director

[rcantoreggi@franklinma.gov](mailto:rcantoreggi@franklinma.gov)